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ABSTRACT

Integrating comments from the literature about CD-ROMs, online searching, and information retrieval, this report describes the initial experience of using InfoTrac at Winona State University (WSU). After finding that students did not tend to order fee-based online searches, the WSU library provided access on a trial basis to bibliographic databases via CD-ROM. After evaluating a number of systems, the library chose InfoTrac because it seemed to be user-friendly and it came equipped with its own hardware. Students in English Department courses were alerted about the new system's arrival because it was thought that InfoTrac might be particularly useful to them. A questionnaire designed by InfoTrac was administered to users. The 50 positive responses (out of 51) reflected that the system was easy to use and searches yielded favorable results. The one negative comment remarked on InfoTrac's inability to use Boolean logic. The WSU periodicals department observed that students working on assignments in basic English composition courses tended to rely exclusively on InfoTrac for their research, while upper-level students began their searches with InfoTrac but then moved on to specialized printed indexes for more articles. As a result of the trial, it was decided to keep the system. A copy of the user questionnaire is attached, and an addendum notes that the library has since acquired a reference workstation from InfoTrac that contains the General Periodicals Index (Academic Version) and SilverPlatter ERIC. A reference list provides 36 endnotes. (SD)

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INFOTRAC AT WINONA STATE UNIVERSITY

by

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abstract: CD-ROM databases should not be viewed as replacements for printed indexes and online searching but instead as a means of encouraging and supporting the use of those services. This article reports the results of a trial of InfoTrac at Winona State University. Other reports and literature on InfoTrac are studied.

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INTRODUCTION

CD-ROM indexes are slowly but steadily taking the spotlight of popular interest away from online indexes. Despite numerous complaints about the disadvantages of CD-ROMS, ranging from too few files to the overall cost[1,2], there are many advantages in compact disk's favor, as Tenopir (1986) pointed out: "Unlike remote databases that charge for online connect time, locally held databases can be searched as much as desired with no additional charges. A library can budget for databases like other subscriptions. They are ideal for database searching by patrons, eliminating concern for password protection or online charges."[3]

Another reason for CD-ROM's popularity lies in the fear that many patrons--and librarians--have concerning online services. As Befeler (1986) explained, "The image of connecting a terminal to a computer somewhere and doing something that "breaks" the system is a concern to potential users. The other factor is the tension associated with the concern that the meter is running and that charges are building by the second as the inexperienced user fumbles with the keyboard trying to formulate or retype a query. Too many times a neophyte user tries the system, has problems, becomes concerned about the cost, and never tries it again."[4] CD-ROM indexes, on the other hand, encourage browsing.[5]

ONLINE USAGE

Winona State University's subscription to DIALOG began in November 1985, but the undergraduate students have yet to discover it exists. During the first year and a half, the service was limited only to graduate students and faculty. Lack of publicity when the service was made available to seniors and juniors meant little usage by those students then. Now the existence of the service is advertised, but students are also charged to use it, and this deters many.

With many libraries nowadays using DIALOG as an "extension of reference service",[6] denying this service to a large majority of library patrons would seem to be a denial of what a library exists to do. "Online database searching should not be an exotic, gourmet treat designed just for special people with special problems".[7] But online charges exist, and trained searchers are necessary to keep the searches (and charges) affordable. But what if the online databases were in a form that did not require passwords or trained searchers? What if the databases were instead on CD-ROM?

SELECTION

Library literature is brimful with examples of CD-ROM indexes that failed, in one way or other, to live up to the salespeople's promises. Problems frequently mentioned in the literature include the costs of the CD-ROM service being more than the online charges,[8,9,10] the CD-ROM databases not being updated as often as the online databases,[11] the databases themselves not being as extensive as the online databases[12] and the equipment for the CD indexes being difficult to install and repair.[13,14]

The selection of a CD-ROM system has many variables involved. Crane and Durfee (1987) list several questions to help would-be buyers in their decision-making process,[15] and Graves, Harper and King's (1987) evaluation of systems and prices is a valuable aid.[16] But, sometimes, after all the research, an actual trial of the system gives the best idea of whether or not it will be suitable for a particular library's patrons.

The academic librarians of Iowa, Minnesota, North Dakota, South Dakota and Wisconsin had a five-state conference April 27-29, 1988, in La Crosse, WI. During the conference, several vendors of CD-ROM indexes presented their wares in a CD-ROM Fair. The advantages and

disadvantages of systems could thus be easily compared. One major disadvantage of a few systems, including WILSONDISC, was that the database was not on just one disk. This means that disks will have to be changed as needed, an extra step to intimidate new users (and worry librarians). SilverPlatter, the supplier of DIALOG databases on CD-ROM, expects libraries to supply the hardware for the system. This can be a major purchase, and one factor that will lead librarians to decide against that system. University Microfilms International offers the option of a library using its own CD-ROM equipment, or UMI will supply equipment at an additional cost.

The most seemingly user-friendly (and library-friendly) CD-ROM indexes at this Fair were Newsbank and InfoTrac. Both systems supply their own hardware, which included quiet printers to print off the results of searches--an option the other CD-ROM indexes at the fair did not have (although UMI advertises that its equipment includes a printer, its workstation at the CD-ROM fair displayed only the monitor, PC, and a separate laser disc player). The PCs for both InfoTrac and Newsbank had color-coded and labeled keys for the keyboard and matching instructional panels (which concealed the floppy disk and laser disc drives) with clearly worded directions that a user could easily follow. Printing the results of searches was as easy as pressing a key marked "print screen" or "print ref".

Information Access Company has several versions of InfoTrac, each one suited for a different type of library. The academic version has two different levels: the ACADEMIC INDEX, indexing 375 scholarly and general interest journals, plus the New York Times; and the GENERAL PERIODICALS INDEX, indexing appropriately 1100 publications. By adding additional CD drive modules, an InfoTrac workstation can also access other InfoTrac databases, thus further expanding the service.

IAC also announced at the fair that InfoTrac could now provide SilverPlatter databases and DIALOG OnDisc databases, services that made this system much more valuable to WSU's needs. Online searching of DIALOG, now also possible through IAC, might be an option for Winona State to consider in the future.

Of course, the short amount of time available to study a system at a conference does not lend itself to careful evaluation. A trial period provides more time for study and evaluation, as the Information Access Company well knows. IAC in the past would call libraries and offer a free month's trial period of their MAGAZINE INDEX on microfilm. Now they offer a free month's trial of InfoTrac on CD-ROM.

English Department professors were alerted about the system's existence by phone once the system was operational, as were other faculty and chairpersons of departments who would find a use for the system. The Special Education Department and Educational Administration Department and the College of Nursing and Health Sciences also received notice of the system's presence at the library, but not because this version of InfoTrac would be of use to them. Members of those departments and college who normally assigned their classes to do DIALOG searches were informed that versions of InfoTrac existed with selected DIALOG databases and that, if patron interest existed in the system and funding was found, those advanced versions of InfoTrac would be considered by the Acquisitions Department.

Questionnaires about the service arrived with InfoTrac and were placed by the system for users to fill out on a volunteer basis. The questions Information Access Company wished answered were similar enough to those the Periodicals Department would have posed for evaluating the system and thus the provided questionnaire was used.

IMPLEMENTATION

On April 22, 1988, Maxwell Library received the Academic Library edition of InfoTrac for a one month trial period. The CD-ROM was installed in the Periodicals Department within view of the Periodicals Counter so that statistics of the usage could be taken. Installation of the three-piece workstation--consisting of monitor, printer and IBM personal computer and laser disk player--went fairly easily, since assembling instructions arrived with the equipment, as did a toll-free number to Information Access Customer Service. The printer provided by InfoTrac would not print, but, even with the lack of that service, the CD-ROM index was being used by curious students within a half hour of its installation. The defective printer was replaced with a new one by Information Access within four days.

Statistics recorded on the usage also kept track of how long a patron spent on the system, in case any question was raised on the overall count of users. The trial period had been chosen to coincide with Periodicals Department's normal time of heavy usage for that quarter, and the system arrived on time: a week after the English Composition II classes had been assigned their final papers--which was when most students started research. As predicted, the Comp II students found the system first, and soon began standing in line to use it.

ANALYSIS

From April 22 to May 27, 1988, 491 uses were made of the InfoTrac service. Fifty-one users turned in questionnaires. Of those fifty-one, two were faculty members, one was an author, and the rest were students. Statistics on how long a user spent searching InfoTrac showed the range of time varying from 5 minutes to two hours. One patron was observed searching and printing out results for three straight hours. It was common to see a patron using the system, then returning later with two or three friends and explaining InfoTrac to them.

InfoTrac was designed to require little or no user training,[17] and WSU users, on the whole, found that to be true. Students accustomed to Maxwell Library's online PALS terminal for books needed no staff help to figure out the commands, while students new to the library only needed slight encouragement before they began experimenting. This is similar to what other libraries found during their test trial of InfoTrac.[18,19,20]

[insert questionnaire and responses]

Typical comments include: "This is great! I read through a list of about 100 references and could choose only the ones I needed, quickly--a great plus for the library"; "We need more of these!"; "Excellent tool for research"; "Love it"; "It's great! Keep it!";

"We HAVE to get this system! It has great potential!"; "InfoTrac is fantastic! This is exactly what our University needs".

Of course, since the choice of filling out the questionnaires was left to the users, the gathered samples may not be completely representative. The enthusiastic and the disappointed tend to express opinions more often than do the merely satisfied.

The problems the one reported disappointed user encountered in using InfoTrac accents the limitations of the system. InfoTrac, like many of the paper periodicals indexes, uses subject heading access and not the Boolean combinations of terms possible to online databases. Van Arsdale and Ostrye (1986) link searching success on InfoTrac with the ability to understand Library of Congress subject headings;[21] and, unfortunately, this is an ability that is slowly vanishing as more and more libraries put their card catalogs online. Yet Jaffe (1988) found that students are easily confused in systems relying on Boolean logic.[22] IAC made the decision not to include the ability to use Boolean logic in searching InfoTrac because it was not considered "appropriate...for providing first-line reference capability for large numbers of untrained users".[23] Carney further explained, "In the investigative process that starts much research, exploring related headings and subheadings promotes a more comprehensive view of a subject area."[24] Because InfoTrac

has the same format as paper indexes, beginning users can extend their search back to the paper indexes without any confusion.

The other problem with InfoTrac lies in the assumptions of its users. Van Arsdale and Ostrye (1986) reported, "Typically, the undergraduate user prints out whatever results from the search term, circles the journals cited, finds the journals left on the shelves, and thinks the topic has been fully researched."[25] Tenopir (September, 1986) adds, "Several librarians felt uncomfortable with the unquestioning assumption by many students that a computer tool must be comprehensive and of higher quality than a printed index."[26] But this can be the problem with any computer tool. "With computers there is an illusion of completeness that does not exist with printed works."[27] Ever since the Maxwell Library's card catalog was put online via the PALS system, WSU students have been observed attempting to use the PALS terminals to search for journal articles rather than use periodical indexes. But rather than condemning InfoTrac (or PALS) for its incompleteness, librarians should be prepared to guide the searchers to other sources. The experience in WSU Periodicals Department was that the Comp II student needing to do a 3-5 page paper started and stopped with InfoTrac. The upper-level students started their searches with InfoTrac, then went back to the specialized paper indexes for more articles.

As a result of the trial of InfoTrac, the Student Senate of Winona State University voted to keep InfoTrac. Unfortunately, the Senate has no control over funding, and that is still a factor in the final decision. Aside from the initial difficulties with the printer, Maxwell Library had none of the equipment problems reported by other libraries.[28,29] Because of the varying computer skills of the staff, the decision was made to leave the equipment turned on at all times and only dim the screen at closing. Ernest and Monath found leaving the system turned on to be the solution to some of their equipment problems.[30]

CONCLUSION

Online databases are a valuable resource. Regrettably, due to the cost in online searching charges and/or the cost in staff time, many library patrons are never allowed to use this service. Even those who are allowed to use the service may have problems in just starting a search.

The cost in user time has not been mentioned in the literature, but it is important nonetheless. At Winona State University, patrons who wish to have a search done on one or more of the online databases

must set up an appointment with the DIALOG librarian. But what about those who don't have time to set up an appointment, or whose only available time is the evening when the DIALOG librarian is not on duty? The time delay for offline printing turns others away from online searches.

CD-ROM systems are not a replacement for online services, but "a bridge between print and online access."[31] Just as InfoTrac-using students refer to more specialized indexes when they need further research, students using the DIALOG databases available on CD-ROM will go back to online for additional sources. In this manner online searching will grow, as more students are able to sample what is available online through the aid of the CD-ROM product and to learn what search strategies work without the worry of connect charges. The searches that are done online will be able to change from the general "give me everything and anything on my topic" searching done at present to more sophisticated and specific research.[32]

At present, an appointment must be set up with the DIALOG librarian for a search strategy to be formulated. But, as users grow more experienced in DIALOG searching through the use of the CD-ROM databases, that appointment may no longer be necessary. Search terms can be chosen by the requestor and searched online exactly as given.

InfoTrac seems the ideal choice to provide DIALOG databases with the additional benefit of the InfoTrac service. InfoTrac attracts users, even those that normally will not use a library,[33,34] and its easy-to-use design encourages even computerphobics to experiment. And, once experimenting begins, even the Boolean logic of DIALOG databases might not seem too daunting. Since the system is "designed to include multiple databases on multiple players accessible simultaneously from multiple stations",[35] one work-station could be available for InfoTrac while another could be used for searching the ERIC database. When the special education classes are using the library, both workstations could be switched to ERIC; and when the Comp II classes are gathering articles, both could be set on InfoTrac. Two workstations, therefore, would be the minimum number needed for WSU's purposes. Because InfoTrac searches as quickly as it does, users are very patient about waiting in line. If the searching speed of the DIALOG databases is slower, obtaining more than two workstations should be considered.

And, since IAC removes the major financial risk from the library by owning and maintaining the equipment, the decision to use CD-ROM over the existing online service is no longer dependent on

finding the equipment. As Vice President of IAC Carney (1986) explained, "Insofar as InfoTrac is concerned, the complexities of market changes resulting from the development of new microprocessor or optical storage technologies are IAC's problem, not that of our subscribers."[36]

Obtaining InfoTrac would solve many of Winona State University's problems with online searching. Best of all, those library patrons that have not been well-served by online databases and have, indeed, been denied access, will be denied no longer.

ADDENDUM

In October 1989, Winona State University acquired one Reference Workstation from InfoTrac, containing the GENERAL PERIODICALS INDEX, ACADEMIC VERSION, and SilverPlatter ERIC.

REFERENCES

1. Barbara Quint, "How Is CD-ROM Disappointing? Let Me Count the Ways," Wilson Library Bulletin 62:32-34,102 (December 1987).
2. Karla J. Pearce, "CD-ROM: Caveat Emptor," Library Journal 113:37-38 (February 1, 1988).
3. Carol Tenopir, "Databases on CD-ROM," Library Journal 111:68-69 (March 1, 1986).
4. Mike Befeler, "The Lawyer's Edge: CD ROM." in CD ROM: THE NEW PAPYRUS. Redmond, WA: Microsoft Press, 1986, p.545-550.
5. Nancy Melin, "The New Alexandria: CD ROM in the Library." in CD ROM: THE NEW PAPYRUS. Redmond, WA: Microsoft Press, 1986, p.509-516.
6. Katherine A. Golomb and Sydelle S. Reisman, "Using DIALOG for Ready Reference," Library Journal 109:786-788 (April 15, 1984).
7. Barbara Quint, "Connect Time," Wilson Library Bulletin 62:68-69 (May 1988).
8. Karen A. Becker, "CD-ROM: A Primer," College and Research Libraries News 48:388-393 (July/August 1987).
9. Pearce, "CD-ROM: Caveat Emptor," p.38.
10. Dick Kollin, "CDROM--Deja Vu?" Database 10:6-7 (June 1987).

11. Quint, "How Is CD-ROM Disappointing?", p.33.

12. Ibid.

13. Pearce, "Caveat Emptor," p.37.

14. Christopher Pooley, "The CD-ROM Marketplace: A Producer's Perspective," Wilson Library Bulletin 62:24-26 (December 1987).

15. Nancy Crane and Tamara Durfee, "Entering Uncharted Territory: Putting CD-ROM in Place," Wilson Library Bulletin 62: 28-30 (December 1987).

16. Gail Graves, Laura G. Harper and Beth F. King, "Planning for CD-ROM in the Reference Department," College and Research Libraries News 48:393-400 (July/August 1987).

17. Richard Carney, "Information Access Company's InfoTrac," Information Technology and Libraries 4:149-153 (June 1985).

18. Kent Stephens, "Laserdisc Technology Enters Mainstream," American Libraries 17:252 (April 1986).

19. Ann Bristow Beltran, "Use of InfoTrac in a University Library," Database 9:63-66 (June 1986).

20. Carol Tenopir, "Infotrac: A Laser Disc System," Library Journal 111:168-169 (September 1, 1986).

21. William O. Van Arsdale and Anne T. Ostrye, "InfoTrac: A Second Opinion," American Libraries 17:514-515 (July/ August 1986).

22. John G. Jaffe, "For Undergrads: InfoTrac Magazine Plus Or Wilsondisc with Readers' Guide & Humanities Index?" American Libraries 19:759-761 (October 1988).

23. Richard D. Carney, "InfoTrac vs. the Confounding of Technology and Its Applications," Database 9:56-61 (June 1986).

24. Ibid, p.59.

25. Van Arsdale and Ostrye, "InfoTrac," p.515.

26. Tenopir, "InfoTrac," p.168.

27. Cynthia Hall, Harriet Talan, and Barbara Pease, "InfoTrac in Academic Libraries: What's Missing in the New Technology?" Database 10:52-56 (February 1987).

28. Douglas J. Ernest and Jennifer Monath, "User Reaction to a Computerized Periodical Index," College and Research Libraries News 47:315-318 (May 1986).

29. Van Arsdale and Ostrye, "InfoTrac," p.514.

30. Ernest and Monath, "User Reaction," p.316.

31. Milo Nelson, "The Lonely Life of the End-User," Wilson Library Bulletin 62:4 (December 1987).

32. Nancy K. Herther, "CD-ROM Year Four: What Have We Learned?" Database 11:106-107 (June 1988).

33. Ann Bristow Beltran, "InfoTrac at Indiana University: A Second Look," Database 10:48-50 (February 1987).

34. Hall, Talan and Pease, "InfoTrac in Academic Libraries," p.53.

35. Carney, "InfoTrac vs. the Confounding of Technology," p.57.

36. Ibid, p.60.

QUESTIONNAIRE AND RESPONSES

The InfoTrac system is currently at your library on a trial basis. This gives you the opportunity to learn through hands-on experience whether or not InfoTrac will be a valuable reference tool for your library.

We would appreciate hearing your opinion regarding InfoTrac and ask that you fill out the survey below with any additional comments you feel would be helpful. Thank you for your cooperation.

	agree strongly	agree somewhat	neither agree nor disagree	disagree somewhat	disagree strongly
InfoTrac can be used without formal training or instructions.	40	10		1	
"Help" screens provide valuable information for using InfoTrac.	30	12	8	1	
I successfully answered my research question using InfoTrac.	35	11	3	2	
Overall, InfoTrac is easy to use.	45	5			1
I prefer to use InfoTrac over comparable reference tools.	47	2	1	1	

Time required to answer my research question using InfoTrac:
(answers ranged from 2 to 30 minutes)

Estimated time required to answer same question using a comparable reference tool: (answers varied from 30 minutes to 2-3 hours-- exceptions were "8 hours" and "hours and hours")